FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2015-16/

1. TESTING OF FINE AGGREGATES: **Date: 07-08-2015**

Sub: Testing of Fine Aggregates.
{Project*: Construction and Repair of Anganawadi Building in Ward No.06, Byatarayanapura Sub-Division}

Ref. : Letter No. AEE/BSD/BBMP/ /2013-14, dated 01-08-2015

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Contractor/Agency*: Sri.M.B.Hombal, Contractor.

TABLE - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	**Percentage Passing**	Specification as Per IS: 383-1970(Reaffirmed 2002) **Percentage Passing**			Remarks
		Zone-I	**Zone-II**	**Zone -III**	
04.75	98.00	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	85.00	60-95	75-100	85-100	
01.18	74.00	30-70	55-90	75-100	
600. mic	46.30	15-34	35-59	60-79	
300.mic	19.50	5-20	8-30	12-40	
150.mic	2.80	0-10	0-10	0-10	

TABLE 1.2 ;

Sl No	Test Conducted	Sample	Results	Requirements as Per IS. Specification IS :383-1970 (Reaffirmed 2002)
1	Silt Content	001	1.44%	Not more than 8%
2.	Specific Gravity	----	2.59	-------

*As Furnished by Client.
The Results relate only to the items tested.

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Campus
BANGALORE UNIVERSITY
Bangalore-560 056.

7/8/2015
Dr. MANJESH .L
ME (Civil Engg) Ph D MISTE MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail: manjeshl@yahoo.com

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
★ ★ ★ ★ ★
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2015-16/

1. TESTING OF COARSE AGGREGATES (40 mm): **Date: 07-08-2015**

Sub: Testing of Coarse Aggregates.
{Project*: Construction and Repair of Anganawadi Building in Ward No.06, Byatarayanapura Sub-Division}
Ref. : Letter No. AEE/BSD/BBMP/ /2013-14, dated 01-08-2015
Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore
Name of the Contractor/Agency*: Sri.M.B.Hombal, Contractor.

Table - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2002) % Passing	
	40 mm Sample	*Single size*	*Graded*
40mm	97.50	85-100	95 – 100
20mm	65.00	0 -20	30- 70
10mm	28.00	0 -5	10- 35
4.75mm	Nil	------	0 - 5

TABLE 1 2 :

SL No	Test conducted	Sample No	Results	Requirements as per IS:383-1970 & Test Conforms to IS 2386(Part I to IV) – 1963 (Reaffirmed on 2002)
1.	Flakiness Index	As above	16.20%	Not to exceed 25 %
2.	Crushing value	----,,----	25.60%	Not to exceed 45 % for concrete other than for wearing surfaces and 30% for concrete for wearing surfaces

*As Furnished by Client.
The Results relate only to the items tested.

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Campus
BANGALORE UNIVERSITY
Bangalore-560 056.

Dr. MANJESH .L
ME (Civil Engg) Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e-mail: manjeshl@yahoo.com

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2015-16/ **Date: 10-08-2015**

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Construction and Repair of Anganawadi Building in Ward No.06, Byatarayanapura Sub-Division}

Ref. : Letter No. AEE/BSD/BBMP/ /2013-14, dated 01-08-2015

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Contractor/Agency*: Sri.M.B.Hombal, Contractor.

PHYSICAL TESTS ON CEMENT

Brand* : Birla
Grade * : 53
Type * : OPC
Date : 01-08-2015 to 08-08-2015

SL No	Name of Test	Results	Requirements as per IS 12269-1987
		Cement Sample	
1	Initial setting time	**155 min**	Shall not be less than 30 min
2	Final setting time	**260 min**	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	**2.60%**	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	**1.80 mm**	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results) b) 7 days (average of three results)	**28.90 N/ Sq mm** **41.30 N/Sq mm**	Shall not be less than 27 N/Sqmm Shall not be less than 37N/Sqmm

*As Furnished by Client.
The Results relate only to the items tested.

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Compus
BANGALORE UNIVERSITY
Bangalore-560 056.

10/8/2015
Dr. MANJESH .L
ME (Civil Engg) Ph D MISTE MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail: manjeshl@yahoo.com

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2015-16/ **Date: 07-08-2015**

1. TESTING OF COARSE AGGREGATES (20mm):

Sub: Testing of Aggregates 20mm.
{Project*: Construction and Repair of Anganawadi Building in Ward No.06, Byatarayanapura Sub-Division}

Ref. : Letter No. AEE/BSD/BBMP/ /2013-14, dated 01-08-2015

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Contractor/Agency*: Sri.M.B.Hombal, Contractor.

Table - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	Percentage passing 20 mm Sample	Requirements as per IS 383-1970 (Reaffirmed on 2002) % Passing	
		Single size	Graded
40 mm	100.00	100.00	100.00
20 mm	97.00	85-100	95 - 100
10 mm	42.00	0 - 20	25 - 55
4.75 mm	Nil	0 - 5	0 - 10

TABLE 1. 2 :

SL No	Test conducted	Sample No	Results	Requirements as per IS:383-1970 & Tests Conforms to IS 2386(Part I to IV) – 1963 (Reaffirmed on 2002)
1.	Flakiness Index	As above	16.50 %	Not to exceed 25 %
2.	Crushing value	----,,----	26.30 %	Not to exceed 45 % for concrete other than for wearing surfaces and 30% for concrete for wearing surfaces

*As Furnished by Client.
The Results relate only to the items tested.

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Campus
BANGALORE UNIVERSITY
Bangalore-560 056.

Dr. MANJESH .L
ME (Civil Engg) Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail: manjeshl@yahoo.com

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2015-16/ **Date: 07-08-2015**

1. TEST REPORT ON REINFORCEMENT STEEL:

Sub: Testing of Reinforcement Steel of diameter 8, 12 and 16mm (TMT bars).
{Project*: Construction and Repair of Anganawadi Building in Ward No.06, Byatarayanapura Sub-Division}

Ref. : Letter No. AEE/BSD/BBMP/ /2013-14, dated 01-08-2015

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Contractor/Agency*: Sri.M.B.Hombal, Contractor.

TABLE – 1

		For 8 mm		For 12mm		For 16mm	
SL No	Details	Test Results	Min. Req as per IS 1786-2008	Test Results	Min. Req as per IS 1786-2008	Test Results	Min.Req. as per IS 1786-2008
01	Observed diameter of bar	**8.0mm**	8.0mm	**12.0mm**	12.0mm	**16.0mm**	16.0 mm
02	Observed Wt/m Length **Kg/m**	**0.401**	0.363	**0.894**	0.834	**1.586**	1.483
03	Proof stress/Yield stress, fy , **N/mm^2**	**554.0**	500.0	**560.0**	500.0	**553.0**	500.0
04	Bend/ Re bend Test	**Ok**	---	**Ok**	---	**Ok**	---
05	Percentage of Elongation, %	**22.30**	12.00	**19.40**	12.00	**21.40**	12.00
06	Ultimate Tensile Strength **N/mm^2**	**617.0**	545.0	**640.0**	545.0	**626.0**	545.0

*As Furnished by Client.
The Results relate only to the items tested.

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Campus
BANGALORE UNIVERSITY
Bangalore-560 056.

7/8/2015
Dr. MANJESH .L
ME (Civil Engg) Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University Jnanabharathi Campus
BANGALORE- 560 056
e- mail: manjeshl@yahoo.com

FOR QUALITY & EXCELLENCE IN HIGHER EDUCATION
Accredited by NAAC

BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Phone Off: 080-22961935 / 1946
E-mail: centrans9@gmail.com

JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2015-16/

DATE: 10-09-2015

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (28 days Compressive Strength)
{Project*: Construction and Repair of Anganawadi Building in Ward No.06, Byatarayanapura Sub-Division}

Ref. : Letter No. AEE/BSD/BBMP/ /2013-14, dated 09-09-2015

Sample supplied to lab by: Assistant Executive Engineer,
Byatarayanapura Sub-Division,
BBMP, Bangalore

Name of the Contractor/Agency*: Sri.M.B.Hombal, Contractor.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1 :

Sl No	Location/ Identification *	Date of Casting*	Date of Testing	Age in Days	C/S Area in Mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	12-08-15	09-09-15	28	22500	525	23.33	**23.33**
	002	"	"	"	"	530	23.55	
	003	"	"	"	"	520	23.11	

*As Furnished by Client.
The Results relate only to the items tested.

10/09/2015

G.R. HARISH
Professor
Department of Civil Engineering
Jnana Bharathi Campus
BANGALORE UNIVERSITY
Bangalore-560 056.

Dr. MANJESH .L
ME (Civil Engg), Ph D MISTE.MIRC
Associate Professor
Department of Civil Engineering
Bangalore University, Jnanabharathi Campus
BANGALORE- 560 056
e-mail. manjeshl@yahoo.com